



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2022-1490; Project Identifier MCAI-2022-01177-R; Amendment 39-22338; AD 2023-03-13]

RIN 2120-AA64

Airworthiness Directives; Airbus Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for all Airbus Helicopters Model AS355E, AS355F, AS355F1, AS355F2, and AS355N helicopters. This AD was prompted by a report of a partially broken tail rotor drive fan support (fan support) and a completely broken fan support. This AD requires repetitively inspecting certain part-numbered fan supports (affected parts), and depending on the results, removing an affected part from service and replacing it with a serviceable part, which constitutes a terminating action for the repetitive inspections. This AD also requires replacing affected parts with serviceable parts unless already accomplished and prohibits installing an affected part on any helicopter, as specified in a European Union Aviation Safety Agency (EASA) AD, which is incorporated by reference. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES:

AD Docket: You may examine the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2022-1490; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

Material Incorporated by Reference:

- For EASA material that is incorporated by reference in this final rule, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email ADs@easa.europa.eu; Internet easa.europa.eu.
- You may view this material at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call (817) 222-5110. It is also available at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2022-1490.

Other Related Service Information: For Airbus Helicopters service information identified in this final rule, contact Airbus Helicopters, 2701 North Forum Drive, Grand Prairie, TX 75052; telephone (972) 641-0000 or (800) 232-0323; fax (972) 641-3775; or at airbus.com/helicopters/services/technical-support.html. This service information is also available at the FAA contact information under *Material Incorporated by Reference* above.

FOR FURTHER INFORMATION CONTACT: Jared Hyman, Aerospace Engineer, Boston ACO Branch, Compliance & Airworthiness Division, FAA, 1200 District Avenue, Burlington, Massachusetts 01803; telephone (781) 238-7799; email 9-AVS-AIR-BACO-COS@faa.gov.

SUPPLEMENTARY INFORMATION:**Background**

EASA, which is the Technical Agent for the Member States of the European Union, has issued a series of EASA ADs with the most recent being EASA AD 2022-0180, dated August 29, 2022 (EASA AD 2022-0180), to correct an unsafe condition for

Airbus Helicopters Model AS 355 E, AS 355 F, AS 355 F1, AS 355 F2, and AS 355 N helicopters, all serial numbers.

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to Airbus Helicopters Model AS355E, AS355F, AS355F1, AS355F2, and AS355N helicopters. The NPRM published in the *Federal Register* on December 5, 2022 (87 FR 74330). The NPRM was prompted by a report of a partially broken right-hand side (RH) fan support and a completely broken left-hand side (LH) fan support found during scheduled maintenance on a Model AS355 helicopter. The NPRM proposed to require repetitively inspecting certain part-numbered fan supports, and depending on the results, removing an affected part from service and replacing it with a serviceable part, which constitutes a terminating action for the repetitive inspections. The NPRM also proposed to require replacing affected parts with serviceable parts unless already accomplished and prohibit installing an affected part on any helicopter, as specified in EASA AD 2022-0180.

You may examine EASA AD 2022-0180 in the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2022-1490.

Discussion of Final Airworthiness Directive

Comments

The FAA received no comments on the NPRM or on the determination of the costs.

Conclusion

These helicopters have been approved by EASA and are approved for operation in the United States. Pursuant to the FAA's bilateral agreement with the European Union, EASA has notified the FAA about the unsafe condition described in its AD. The FAA reviewed the relevant data and determined that air safety requires adopting this AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition on these helicopters. Except for minor editorial changes, this AD is adopted as proposed in the NPRM.

Related Service Information Under 1 CFR Part 51

EASA AD 2022-0180 requires repetitively inspecting certain part-numbered RH and LH fan supports for a crack and broken leg and, if there is any crack or broken leg, replacing the affected fan support with a serviceable fan support. If the replacement is not required as a result of the inspection, EASA AD 2022-0180 requires the replacement at a longer compliance time. EASA AD 2022-0180 also states that the replacement constitutes terminating action for the repetitive inspections and prohibits installing an affected part on any helicopter.

This material is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Other Related Service Information

The FAA also reviewed Airbus Helicopters Alert Service Bulletin No. AS355-05.00.88, Revision 1, dated July 20, 2022. This service information specifies procedures for inspecting the RH and LH fan supports for a crack and failure (broken leg), replacing an affected part with a serviceable part, and performing a balancing of the tail rotor drive shaft.

Differences Between this AD and the EASA AD

EASA AD 2022-0180 requires replacing each affected part with a serviceable part if any crack or broken leg is found during any required inspection or if the replacement was not previously performed as a result of an inspection, whereas this AD requires removing each affected part from service and replacing with a serviceable part if any crack or broken leg is found during any required inspection or if the replacement was not previously performed as a result of an inspection.

Costs of Compliance

The FAA estimates that this AD affects 31 helicopters of U.S. Registry. Labor rates are estimated at \$85 per work-hour. Based on these numbers, the FAA estimates the following costs to comply with this AD.

Visually inspecting a fan support for a crack and broken leg takes about 1 work-hour for an estimated cost of \$170 per helicopter (2 fan supports per helicopter) per inspection cycle and up to \$5,270 for the U.S. fleet per inspection cycle.

Replacing a fan support takes about 8 work-hours and parts cost about \$600 for an estimated cost of \$1,280 per replacement and up to \$39,680 for the U.S. fleet

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive:

2023-03-13 Airbus Helicopters: Amendment 39-22338; Docket No. FAA-2022-1490; Project Identifier MCAI-2022-01177-R.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Airbus Helicopters Model AS355E, AS355F, AS355F1, AS355F2, and AS355N helicopters, all serial numbers, certificated in any category.

(d) Subject

Joint Aircraft Service Component (JASC) Code: 6500, Tail Rotor Drive System.

(e) Unsafe Condition

This AD was prompted by a report of a partially broken right-hand side tail rotor drive fan support (fan support) and a completely broken left-hand side fan support. The FAA is issuing this AD to detect a cracked or broken fan support leg. The unsafe condition, if not addressed, could result in loss of main gearbox and engine oil cooling function, loss of tail rotor drive, and subsequent loss of control of the helicopter.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Requirements

Except as specified in paragraphs (h) and (i) of this AD: Comply with all required actions and compliance times specified in, and in accordance with, European Union Aviation Safety Agency AD 2022-0180, dated August 29, 2022 (EASA AD 2022-0180).

(h) Exceptions to EASA AD 2022-0180

(1) Where EASA AD 2022-0180 requires compliance in terms of flight hours, this AD requires using hours time-in-service.

(2) Where EASA AD 2022-0180 refers to the effective dates specified in paragraphs (h)(2)(i) and (ii) of this AD, this AD requires using the effective date of this AD.

(i) May 3, 2022 (the effective date of EASA AD 2022-0069, dated April 19, 2022).

(ii) The effective date of EASA AD 2022-0180.

(3) Where paragraphs (2) and (3) of EASA AD 2022-0180 specify “replacing each affected part with a serviceable part,” for this AD, replace that text with “removing each affected part from service and replacing it with a serviceable part.”

(4) Where the service information referenced in EASA AD 2022-0180 specifies to use tooling, this AD allows the use of equivalent tooling.

(5) Where the service information referenced in EASA AD 2022-0180 specifies to discard parts, this AD requires removing those parts from service.

(6) This AD does not adopt the Remarks paragraph of EASA AD 2022-0180.

(i) No Reporting Requirement

Although the service information referenced in EASA AD 2022-0180 specifies to submit certain information to the manufacturer, this AD does not include that requirement.

(j) Special Flight Permit

Special flight permits are prohibited.

(k) Alternative Methods of Compliance (AMOCs)

(1) The Manager, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local

Flight Standards District Office, as appropriate. If sending information directly to the manager of the International Validation Branch, send it to the attention of the person identified in paragraph (l) of this AD. Information may be emailed to: 9-AVS-AIR-730-AMOC@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(l) Related Information

For more information about this AD, contact Jared Hyman, Aerospace Engineer, Boston ACO Branch, Compliance & Airworthiness Division, FAA, 1200 District Avenue, Burlington, Massachusetts 01803; telephone (781) 238-7799; email 9-AVS-AIR-BACO-COS@faa.gov.

(m) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) European Union Aviation Safety Agency (EASA) AD 2022-0180, dated August 29, 2022.

(ii) [Reserved]

(3) For EASA AD 2022-0180, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email ADs@easa.europa.eu; Internet easa.europa.eu. You may find the EASA material on the EASA website at ad.easa.europa.eu.

(4) You may view this service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call (817) 222-5110.

(5) You may view this material that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email fr.inspection@nara.gov, or go to: www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued on February 7, 2023.

Christina Underwood, Acting Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.

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